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UNITED STATES DEPARTMENT OF COMMERCE  
Patent and Trademark Office  
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Washington, D.C. 20231

OCTOBER 04, 2000

PTAS

CABOT CORPORATION  
MICHELLE B. LANDO  
157 CONCORD ROAD  
BILLERICA, MASSACHUSETTS 01821



\*101437667A\*

UNITED STATES PATENT AND TRADEMARK OFFICE  
NOTICE OF RECORDATION OF ASSIGNMENT DOCUMENT

THE ENCLOSED DOCUMENT HAS BEEN RECORDED BY THE ASSIGNMENT DIVISION OF THE U.S. PATENT AND TRADEMARK OFFICE. A COMPLETE MICROFILM COPY IS AVAILABLE AT THE ASSIGNMENT SEARCH ROOM ON THE REEL AND FRAME NUMBER REFERENCED BELOW.

PLEASE REVIEW ALL INFORMATION CONTAINED ON THIS NOTICE. THE INFORMATION CONTAINED ON THIS RECORDATION NOTICE REFLECTS THE DATA PRESENT IN THE PATENT AND TRADEMARK ASSIGNMENT SYSTEM. IF YOU SHOULD FIND ANY ERRORS OR HAVE QUESTIONS CONCERNING THIS NOTICE, YOU MAY CONTACT THE EMPLOYEE WHOSE NAME APPEARS ON THIS NOTICE AT 703-308-9723. PLEASE SEND REQUEST FOR CORRECTION TO: U.S. PATENT AND TRADEMARK OFFICE, ASSIGNMENT DIVISION, BOX ASSIGNMENTS, CG-4, 1213 JEFFERSON DAVIS HWY, SUITE 320, WASHINGTON, D.C. 20231.

RECORDATION DATE: 07/24/2000

REEL/FRAME: 011001/0414  
NUMBER OF PAGES: 9

BRIEF: ASSIGNMENT OF ASSIGNOR'S INTEREST (SEE DOCUMENT FOR DETAILS).

ASSIGNOR:

CABOT CORPORATION

DOC DATE: 03/27/2000

ASSIGNEE:

CABOT MICROELECTRONICS CORPORATION  
870 N. COMMONS DRIVE  
AURORA, ILLINOIS 60504

SERIAL NUMBER: 08891649  
PATENT NUMBER: 6126853

FILING DATE: 07/11/1997  
ISSUE DATE: 10/03/2000

SERIAL NUMBER: 09503996  
PATENT NUMBER:

FILING DATE: 02/14/2000  
ISSUE DATE:

SERIAL NUMBER: 09501221  
PATENT NUMBER:

FILING DATE: 02/10/2000  
ISSUE DATE:

SERIAL NUMBER: 08944036  
PATENT NUMBER:

FILING DATE: 09/29/1997  
ISSUE DATE:

19704 U.S. PTO  
10/616335  
07/09/03

011001/0414 PAGE 2

SERIAL NUMBER: 09487018 PATENT NUMBER:	FILING DATE: 01/19/2000 ISSUE DATE:
SERIAL NUMBER: 08891468 PATENT NUMBER: 6068787	FILING DATE: 07/11/1997 ISSUE DATE: 05/30/2000
SERIAL NUMBER: 09366588 PATENT NUMBER:	FILING DATE: 08/04/1999 ISSUE DATE:
SERIAL NUMBER: 09084630 PATENT NUMBER:	FILING DATE: 05/26/1998 ISSUE DATE:
SERIAL NUMBER: 08994894 PATENT NUMBER:	FILING DATE: 12/19/1997 ISSUE DATE:
SERIAL NUMBER: 09062327 PATENT NUMBER: 6062968	FILING DATE: 04/17/1998 ISSUE DATE: 05/16/2000
SERIAL NUMBER: 09114003 PATENT NUMBER: 6126532	FILING DATE: 07/10/1998 ISSUE DATE: 10/03/2000
SERIAL NUMBER: 09105060 PATENT NUMBER:	FILING DATE: 06/26/1998 ISSUE DATE:
SERIAL NUMBER: 08901803 PATENT NUMBER: 6083419	FILING DATE: 07/28/1997 ISSUE DATE: 07/04/2000
SERIAL NUMBER: 09086659 PATENT NUMBER:	FILING DATE: 05/29/1998 ISSUE DATE:
SERIAL NUMBER: 09440525 PATENT NUMBER:	FILING DATE: 11/15/1999 ISSUE DATE:
SERIAL NUMBER: 09040630 PATENT NUMBER:	FILING DATE: 03/18/1998 ISSUE DATE:
SERIAL NUMBER: 09105555 PATENT NUMBER: 6063306	FILING DATE: 06/26/1998 ISSUE DATE: 05/16/2000
SERIAL NUMBER: 09105065 PATENT NUMBER:	FILING DATE: 06/26/1998 ISSUE DATE:
SERIAL NUMBER: 09113248 PATENT NUMBER: 6117000	FILING DATE: 07/10/1998 ISSUE DATE: 09/12/2000
SERIAL NUMBER: 09425473 PATENT NUMBER:	FILING DATE: 10/22/1999 ISSUE DATE:
SERIAL NUMBER: 60148813 PATENT NUMBER:	FILING DATE: 08/13/1999 ISSUE DATE:
SERIAL NUMBER: 09405249 PATENT NUMBER:	FILING DATE: 09/27/1999 ISSUE DATE:

011001/0414 PAGE 3

SERIAL NUMBER: 60142706  
PATENT NUMBER:

FILING DATE: 07/07/1999  
ISSUE DATE:

SERIAL NUMBER: 09504058  
PATENT NUMBER:

FILING DATE: 02/14/2000  
ISSUE DATE:

SERIAL NUMBER: 09429188  
PATENT NUMBER:

FILING DATE: 10/28/1999  
ISSUE DATE:

SERIAL NUMBER: 09428965  
PATENT NUMBER:

FILING DATE: 11/04/1999  
ISSUE DATE:

SERIAL NUMBER: 09440401  
PATENT NUMBER:

FILING DATE: 11/15/1999  
ISSUE DATE:

SERIAL NUMBER: 60169382  
PATENT NUMBER:

FILING DATE: 12/07/1999  
ISSUE DATE:

SERIAL NUMBER: 60148878  
PATENT NUMBER:

FILING DATE: 08/13/1999  
ISSUE DATE:

SERIAL NUMBER: 60172540  
PATENT NUMBER:

FILING DATE: 12/17/1999  
ISSUE DATE:

TONYA LEE, EXAMINER  
ASSIGNMENT DIVISION  
OFFICE OF PUBLIC RECORDS

## ASSIGNMENT OF PATENT APPLICATIONS

Whereas, CABOT CORPORATION, hereinafter "ASSIGNOR," a corporation organized and existing under the laws of Delaware having its principal office at 75 State Street, Boston, Massachusetts 02109, is the sole and exclusive owner of record in the United States Patent and Trademark Office for the applications for Letters Patent of the United States of America listed on Schedule A attached.

CABOT MICROELECTRONICS CORPORATION, hereinafter "ASSIGNEE," a corporation organized and existing under the laws of Delaware and having a principal office at 870 N. Commons Drive, Aurora, Illinois 60504, is desirous of acquiring all right, title and interest in, to and under said aforementioned patent applications and the inventions respectively covered thereby.

NOW, THEREFORE, for good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, ASSIGNOR hereby sells, assigns and transfers to ASSIGNEE, and the successors, assigns and legal representatives of ASSIGNEE, the entire right, title and interest in and to the applications for Letters Patent of the United States of America listed on Schedule A attached and the inventions covered thereby, and in and to all Letters Patents to be obtained from said applications, including any continuations, divisions, continuations-in part claiming priority thereto, as well any reissues or reexaminations thereof (collectively referred to hereinafter as the "PROPERTY"), the same to be held and enjoyed by ASSIGNEE for its own use and enjoyment, and for the use and enjoyment of its successors, assigns and legal representatives, to the end of the terms for which said PROPERTY has been or will be granted, as fully and entirely as the same would have been held and enjoyed by ASSIGNOR if this assignment and sale had not been made; together with all claims by ASSIGNOR for damages by reason of infringement of the PROPERTY with the right to sue for, and collect the same for its own use and benefit, and for the use and benefit of its successors, assigns or other legal representatives.

ASSIGNOR agrees that it will, by its officers, employees, legal representatives or other persons duly authorized, communicate to ASSIGNEE or the representatives thereof, any facts known to it respecting said PROPERTY, and will, upon request and at ASSIGNEE's expense, testify in any legal proceedings, sign all lawful papers, make all rightful oaths, and generally perform all other further lawful acts, deemed necessary and expedient by ASSIGNEE or by counsel of ASSIGNEE, to assist or enable ASSIGNEE to obtain and enforce full benefits from the rights and interests herein assigned. ASSIGNOR additionally agrees to execute short form copies of this assignment or portions thereof regarding any or all of the aforementioned PROPERTY, as required by ASSIGNEE in the future.

ASSIGNOR agrees to waive all its rights and privileges to attack the utility, novelty, validity or enforceability of any or all of the aforesaid PROPERTY which mature from the listed applications which ASSIGNOR has assigned as against any one claiming a right under any or all of the aforementioned PROPERTY under ASSIGNOR's assignment or grant.

IN WITNESS WHEREOF, CABOT CORPORATION has caused its name to be signed by its duly authorized representative and its corporate seal to be affixed hereto this 27<sup>th</sup> day of March, 2000.

CABOT CORPORATION

By: Samuel W. Badman  
Name: ~~Sam~~ Samuel W. Badman  
Title: Chairman and CEO

[CORPORATE SEAL]

Witnessed:

By: Brian A. Berube  
Name: Brian A. Berube  
Title: Counsel

UNITED STATES OF AMERICA :

COMMONWEALTH OF MASSACHUSETTS :

COUNTY OF SUFFOLK :

On this 27<sup>th</sup> day of March, 2000, before me, a Notary Public in and for the above mentioned county and state, personally appeared Samuel W. Balaban, to me known and known to me to be the person who signed the foregoing Assignment on behalf of CABOT CORPORATION and who being duly sworn by me, did depose and say that s/he is the Chairman of the Board and Chief Executive Officer of CABOT CORPORATION, the company described in and on whose behalf s/he has executed the foregoing instrument; and that s/he is so authorized to execute this instrument on behalf of said corporation.

Carol F. Driscoll  
Notary Public  
My Commission Expires 3/20/2003

[NOTARIAL SEAL]

Schedule A

<u>Docket No.</u>	<u>Appln. No.</u>	<u>Appln. Date</u>
96071ACIP	08/891649	11JL1997
96071ACIP2	08/944036	29SE1997
96071ADIV	09/366588	04AU1999
96073CIP2DIV	09/503996	14FE2000
96073CIPDIV	09/487018	19JA2000
96092	09/084630	26MY1998
96092DIV	09/501221	10FE2000
96093CIP3	08/891468	10JL1997
96098CIP	08/994894	19DE1997
96119CIP1	09/062327	17AP1998
96119CIP2	09/114003	10JL1998
96125	09/105060	26JE1998
97045	08/901803	28JL1997
97045CIP	09/086659	29MY1998
98003	09/440525	15NO1999
98010	09/040630	18MR1998
98011	09/105555	26JE1998
98012	09/105065	26JE1998
98068	09/113248	10JL1998
98116	09/425473	22OC1999
98124P	60/148813	13AU1999
98125	09/405249	27SE1999
98126P	60/142706	07JL1999
98134	09/504058	14FE2000

Schedule A Cont'd.

<u>Docket No.</u>	<u>Appln. No.</u>	<u>Appln. Date</u>
99001	09/429188	28OC1999
99073	09/428965	04NO1999
99074	09/440401	15NO1999
99077P	60/169382	07DE1999
99096P	60/148878	13AU1999
99106P	60/172540	17DE1999

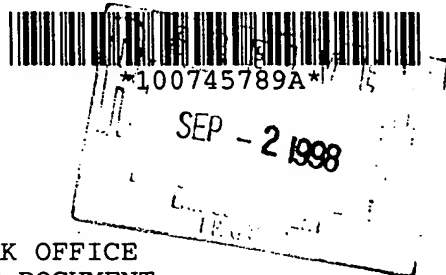


98010  
USA (1.14)  
**UNITED STATES DEPARTMENT OF COMMERCE**  
**Patent and Trademark Office**  
ASSISTANT SECRETARY AND COMMISSIONER  
OF PATENTS AND TRADEMARKS  
Washington, D.C. 20231

AUGUST 26, 1998

PTAS

CABOT CORPORATION  
MICHELLE B. LANDO  
LAW DEPARTMENT  
157 CONCORD ROAD  
BILLERICA, MA 01821



**UNITED STATES PATENT AND TRADEMARK OFFICE**  
**NOTICE OF RECORDATION OF ASSIGNMENT DOCUMENT**

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RECORDATION DATE: 06/05/1998

REEL/FRAME: 9251/0431  
NUMBER OF PAGES: 5

BRIEF: ASSIGNMENT OF ASSIGNOR'S INTEREST (SEE DOCUMENT FOR DETAILS).

ASSIGNOR:  
KAUFMAN, VLASTA BRUSIC

DOC DATE: 05/26/1998

ASSIGNOR:  
KISTLER, RODNEY C.

DOC DATE: 05/26/1998

ASSIGNOR:  
WANG, SHUMIN

DOC DATE: 05/26/1998

ASSIGNEE:  
CABOT CORPORATION  
75 STATE STREET  
BOSTON, MASSACHUSETTS 02109

SERIAL NUMBER: 09040630  
PATENT NUMBER:

FILING DATE: 03/18/1998  
ISSUE DATE:

COMPUTER ENTRY 9/3/98 MBL  
FILE UPDATED 9/3/98

ML

9251/0431 PAGE 2

SEDLEY PYNE, PARALEGAL  
ASSIGNMENT DIVISION  
OFFICE OF PUBLIC RECORDS

06-23-1998

U.S. DEPARTMENT OF COMMERCE  
Patent and Trademark Office

IEET



To the Honorable Commissioner of Patents

100745789

Attached original documents or copy thereof

## 1. Name of conveying party(ies):

Vlasta Brusic Kaufman

Rodney C. Kistler

Shumin Wang

## 2. Name and address of receiving party(ies):

Name:

Cabot Corporation

Internal Address:

Street Address:

75 State Street

Additional name(s) of conveying party(ies) attached? No

## 3. Nature of Conveyance:



Assignment



Merger



Security Agreement



Change of Name



Other

City: Boston State: MA ZIP 02109

Additional name(s) & address(es) attached? ☐ Yes ☐ No

Execution Date(s): May 26, 1998

## 4. Application number(s) or patent number(s):

If this document is being filed together with a new application, the execution date of the application is:

A. Patent Application No.(s)

09/040,630

B. Patent No.(s)

Additional numbers attached? ☐ Yes ☒ NoAdditional numbers attached? ☐ Yes ☐ No

## 5. Name and address of party to whom correspondence concerning document should be mailed:

Name: Michelle B. Lando

Internal Address: Law Department

Street Address: Cabot Corporation

157 Concord Road

City: Billerica State MA ZIP 01821

## Total Number of applications and patents involved:

Total fee (37 CFR 3.41): \$ 40.00

☐ Enclosed☒ Authorized to be charged to deposit account

## 8. Deposit Account Number: 03-0060

☒ Duplicate Copy of this page is attached.

DO NOT USE THIS SPACE

## 9. Statement and signature.

*To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document.*

Michelle B. Lando

6/2/98

Name of Person Signing

Signature

Date

Total number of pages including cover sheet: 5

OMB No. 0651-0011

Do not detach this portion:

Mail documents to be recorded with required cover sheet information to:

Commissioner of Patents and Trademarks

Box Assignments

Washington, D.C. 20231

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**ASSIGNMENT**

**WHEREAS**, we, Vlasta Brusic Kaufman of 721 Easton Avenue, Geneva, Illinois 60134, a citizen of the United States of America; Rodney C. Kistler of 42W597 Steeple Chase, St. Charles, Illinois 60175, a citizen of the United States of America; and Shumin Wang of 1006 Dakota Circle, Naperville, Illinois 60563, a citizen of the People's Republic of China, having invented the subject matter described in the U. S. Patent Application entitled **"CHEMICAL MECHANICAL POLISHING SLURRY USEFUL FOR COPPER SUBSTRATES,"** the specification of which was filed on **March 18, 1998**, as United States Patent Application Serial No. **09/040,630**; and

**WHEREAS**, Cabot Corporation, a corporation organized and existing under and by virtue of the laws of the State of Delaware, doing business at 75 State Street, Boston, Massachusetts 02109, is desirous of acquiring the entire right, title and interest in and to said application and the invention therein described and claimed and any Letters Patent that may be issued upon said application or for the improvements therein contained.

**NOW THEREFORE**, for and in consideration of the sum of One Dollar (\$1.00) lawful money of the United States and other valuable considerations, in hand paid to us, the receipt and sufficiency whereof is hereby acknowledged, we, Vlasta Brusic Kaufman, Rodney C. Kistler, and Shumin Wang have sold, assigned and transferred and do hereby sell, assign and transfer unto Cabot Corporation, its successors and assigns, the entire right, title and interest in and to said application and the invention therein contained, including the right to apply for any Letters Patent in the United States of America and in any and all foreign countries on said invention, and any and all other applications for Letters Patent on said invention, in whatsoever countries, including all divisional, renewal, substitution, continuation, continuation-in-part, reissue, re-examination and Convention applications based upon said invention or upon said application, to the full end of the term or terms for which said Letters Patent may be issued, and every priority right that is or may be predicated upon or arise from said invention, said application and said Letters Patent, the same to be held and enjoyed by

Cabot Corporation, its successors and assigns, the same as it would have been held and enjoyed by us if this assignment and sale had not been made.

And we hereby authorize Cabot Corporation, to file patent applications in any or all countries on any or all of said invention in our name or in the name of Cabot Corporation, or otherwise as Cabot Corporation, may deem advisable, under any International Convention or otherwise.

And we hereby authorize the Commissioner of Patents of the United States and the empowered officials of all other governments to issue or transfer all said Letters Patent to Cabot Corporation, as assignee of the entire right, title and interest therein or otherwise as Cabot Corporation, may direct, in accordance with this instrument of assignment.

We hereby represent and warrant that there are no rights or interests inconsistent with the rights and interests granted herein and that we will not execute any instrument or grant or transfer any rights or interests inconsistent with the rights and interest granted herein, and that we, Vlasta Brusic Kaufman, Rodney C. Kistler and Shumin Wang, bind ourselves and our heirs, executors, administrators and legal representatives, as the case may be, to execute and deliver to Cabot Corporation, its successors and assigns, any further documents or instruments and do any and all further acts that may reasonably be deemed necessary by Cabot Corporation, to enable Cabot Corporation, its successors or assigns, to file applications for the invention in any country where it may elect to file such applications, and that may be necessary to vest in Cabot Corporation, its successors and assigns, the title herein conveyed or intended so to be, and to enable such title to be recorded in the United States and foreign countries where such application or applications may be filed.

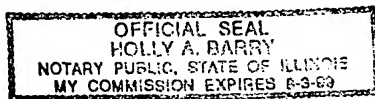
And we further covenant and agree, in consideration of the premises, that we, our executors and administrators, will at any time, upon request, communicate to Cabot Corporation, its successors and assigns, any facts relating to the invention and the improvements contained therein and the history thereof, known to us or our executors and administrators, and that we will testify as to the same in any interference or other litigation when requested so to do by Cabot Corporation, its successors and assigns.

IN TESTIMONY WHEREOF, I, Vlasta Brusic Kaufman, have hereunto set my hand  
and seal this 26<sup>th</sup> day of May, 1998.

Vlasta Brusic Kaufman  
Vlasta Brusic Kaufman

STATE OF ILLINOIS       )  
                                      ) ss.  
COUNTY OF DU PAGE    )

On this 26<sup>th</sup> day of May, 1998, before me personally appeared **Vlasta Brusic Kaufman**, to me known and known to me to be the individual described herein and who executed the foregoing instrument, and she duly acknowledged to me that she executed the same for the purpose therein set forth.



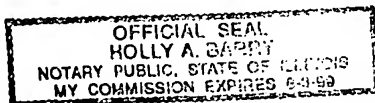
Holly A. Barry  
NOTARY PUBLIC  
My Commission Expires: 6/3/99

IN TESTIMONY WHEREOF, I, Rodney C. Kistler, have hereunto set my hand and  
seal this 26<sup>th</sup> day of May, 1998.

Rodney C. Kistler  
Rodney C. Kistler

STATE OF ILLINOIS       )  
                                      ) ss.  
COUNTY OF DU PAGE    )

On this 26<sup>th</sup> day of May, 1998, before me personally appeared **Rodney C. Kistler** to me known and known to me to be the individual described herein and who executed the foregoing instrument, and he duly acknowledged to me that he executed the same for the purpose therein set forth.



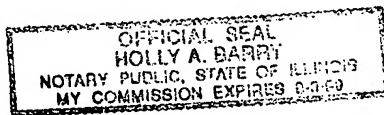
Holly A. Barry  
NOTARY PUBLIC  
My Commission Expires: 6/3/99

IN TESTIMONY WHEREOF, I, Shumin Wang, have hereunto set my hand and seal  
this 26th day of May, 1998.

SE Wang  
Shumin Wang

STATE OF ILLINOIS       )  
  ) ss.  
COUNTY OF DU PAGE    )

On this 26th day of May, 1998, before me personally appeared **Shumin Wang**  
to me known and known to me to be the individual described herein and who executed the  
foregoing instrument, and she duly acknowledged to me that she executed the same for the  
purpose therein set forth.



Holly A. Barry  
**NOTARY PUBLIC**  
My Commission Expires: 8/3/99

assign19mmd